

IN THE SPECIFICATION:

Page 1, before the first line, please insert the following heading: -- Field of the Invention --;

Page 1, after line 5, please insert the following heading: -- Background of the Invention --;

Page 1, after line 30, please insert the following heading: -- Summary of the Invention --;

Page 4, after line 8, please insert the following heading: -- Brief Description of the Drawings --;

Page 4, after line 25, please insert the following heading: -- Detailed Description of the Invention --;

Please insert the following paragraphs as amended at Page 8, line 20 through Page 9 line 29:

Fig. 4 illustrates part of the above system in somewhat more detail. It may be seen that the engine controller 52 is provided with a speed or pressure demand signal 80 resulting from a thrust demand, represented by the arrow ~~[[82]] 56. This is generally equivalent to the throttle position signal 56 in Fig. 3.~~ The engine controller 52 also receives a speed or pressure voltage signal 84 which it converts into a speed or pressure feedback signal ~~[[86]] 63.~~ The speed or pressure voltage signal is derived from a speed or pressure sensor 88 provided within the aircraft engine.

The engine controller uses the speed or pressure demand signal 80 and the speed or pressure feedback signal ~~[[86]] 63~~ to calculate a fuel flow demand, which is output as a first fuel flow demand signal 78.

The first fuel flow demand signal 78 is input into a comparator 92 within the overthrust protector 76. The comparator 92 is also provided with a second fuel flow demand signal 94 indicative of a fuel flow limit. The second fuel flow demand signal 94 is provided by the overthrust protector. The overthrust protector includes a throttle at idle signal ~~[[96]] 60,~~ a speed at idle signal 98 and a speed at red line signal 100. In addition, a speed feedback signal 102 is

provided, this resulting from a speed signal voltage 104 in turn derived from a speed sensor 106 provided within the engine. The overthrust protector is able to compare these various signals to provide a maximum fuel flow demand which the engine controller should be requesting for these conditions. This is the fuel flow demand signal 94.

The comparator 92 chooses the lower one of the two fuel flow demand signals 78 and 94. Therefore, provided that the fuel flow demand signal 78 (produced by the engine controller 52) is below the perceived maximum fuel flow demand signal 90 (as calculated by the overthrust protector 76), the fuel flow demand signal 78 is chosen by the comparator. The fuel flow demand signal 78 is then used by the overthrust protector to determine an FMV demand signal 68. The FMV demand signal 68 is compared with an FMV position feedback signal [[74]] 70 an FMV position error which is used to control a drive current for a fuel metering valve torque motor 108. The torque motor 108 drives the fuel metering valve 64 into a desired position. A fuel metering valve linear variable differential transformer 110 converts the position of the fuel metering valve into a voltage signal 112 which is used to derive the FMV feedback signal [[74]] 70. This provides a closed loop control for the fuel metering valve position.